

Date: Thursday, 11/09/2008 10:42:30 AM
User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	MID TUBE ASSEMBLY
Job Number :	41979		
Estimate Number :	10469		
P.O. Number :		Part Number :	D3391023
This Issue :	11/09/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D3391 REV H
First Issue :	/ /	Project Number :	N/A
Previous Run :	41752	Drawing Revision :	H
	Type :	Material :	
	SKIDTUBES	Due Date :	10/10/2008
Written By :		Qty:	1
Checked & Approved By :	JLD 08.9.11	Um:	Each
Comment :	Est. A 05.10.20 New Issue KJ/EC Est. B 06.02.10 ECN773 dwg rev.D EC est C 07.03.20 rev F dwg EC est D 07.03.28 re-format EC est E 07.10.31 ecn 1053P EC Est Rev:F ECN 1056 07-11-13 DD verified by: EC Est Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC Est Rev:H 08-09-10 revH as per dwg DD verified by:EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D25001100	Skidtube Extrusion
-----	-----------	--------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SKIDTUBE EXTRUSION

Pick:

Qty	Part Number	Description
1	D2500-1-100	Extrusion

Batch
B 37065

JLD 8-9-30

2.0	D3391021	Fwd Tube Assembly
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Fwd Tube Assembly

Batch: B 41934

D 11 8-10-22

3.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
-----	-------------	-----------------------



Comment: LANDING GEAR RESOURCE 1

1-Cut tube to finish length as per Dwg D3391

2-Identify as D3391-023

3-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

JLD 8-9-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 11/09/2008 10:42:30 AM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: MID TUBE ASSEMBLY

Job Number: 41979

Part Number: D3391023

Job Number:



Seq. #:

Machine Or Operation:

Description :

- 4-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"
- 5-Remove .030" from Fwd indexing Ridge as per Dwg D3391
- 6-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391
- 7-Deburr
- 8-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,
- 9-Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (14 holes) as per Dwg D3391 and 2 holes in section Detail "J", do not open wearplate holes of section "J"
- 10-Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391
- 11-Open .375" holes to .438" ***do not open fwd saddle holes***
- 12-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)
- 13- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer drilled pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021
- 14- Transfer drill 2 wearplate holes into D3391-021 using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.
- 15- Locating from two fwd wearplate holes drillol remaining 6 wearplte holes in D3391-021 using DT8937
- 16- Open 2 fwd wearplate holes in D3391-023 to .250" dia.
- 17- counterbore two aft wearplate holes in D3391-021 as per dwg
- 18- Open 12 wearplate holes in D3391-021 to 0.297" dia.
- 19-Deburr and blow out all chips from inside tube

Jb8-920

M
21022

4.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/10/02 (FO)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Drawing Name: MID TUBE ASSEMBLY

Job Number: 41979

Part Number: D3391023

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



08-10-22

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

ME

6.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M 7-12-23

7.0

D33891

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEB

Pick:

Qty

Part Number

Description

Batch

1

D3389-1

Web

B41833

A/R

Sikaflex-241/-291

M109338

Sikaflex expire date:

7-12-11

Start:

7-12-23

Time:

8:20

Finish:

8/10/24

Time:

7:00AM

M 7-12-23

8.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open float bag holes as per dwg

2-C'sink float bag holes as per dwg

3- Prepare tube for welding

4-Bond web in place as per Dwg D3391 & QSI 015.

Adhere for 12 hours)

M 7-12-23

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8-09/10/24 @

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Drawing Name: MID TUBE ASSEMBLY

Job Number: 41979

Part Number: D3391023

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D36811

Spacer



Comment: Qty.: 5.0000 Each(s)/Unit Total: 5.0000 Each(s)

SPACER

batch: B 41242 M 7-10-24 (S)

11.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

Weld crossbolt spacer as per dwg D3391 & QSI 004

A/R M 107213
DE 08/10/27

12.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 08/10/28 (X)

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/10/28 (X)

14.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

8:50
320 OF
9:20

M-L 08/10/30

(X)

15.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 08/11/20 (1)

16.0

D35911

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bushing

43172

FL

17.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: SKIDTUBESS RESOURCE 1

1- insert D3391-021 into D3391-23

M-L / FL 08/11/20 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Drawing Name: MID TUBE ASSEMBLY

Job Number: 41979

Part Number: D3391023

Job Number:



Seq. #:

Machine Or Operation:

Description :

2- insert T-pins into first and third fwd saddle holes

3- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per DSI 9364

4- remove T-pins and locate DT9415 from first and third crossbolt hole using T-pins and clekos

5- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". Remove DT9415

6- deburr, re-alodine and blow out chips

7- press fit D3591-1 spacers using DT9416 starting from 0.500" side

FD / M
08/11/20

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/11/20

19.0

ALS41032130

Insert



Comment: Qty.: 22.0000 Each(s)/Unit Total: 22.0000 Each(s)

INSERT

batch: *M165819*

or equivalent

per QSI 017

ell

20.0

ALS41032225

Insert



Comment: Qty.: 10.0000 Each(s)/Unit Total: 10.0000 Each(s)

INSERT

batch: *N/A*

or equivalent

per QSI 017

S 8/11/21

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Inserts as per Dwg

08-11-20

22.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/11/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Drawing Name: MID TUBE ASSEMBLY

Job Number: 41979

Part Number: D3391023

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

D3401041

Tow Cap Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Tow Cap Assembly

Pick:

Qty	Part Number	Description	Batch
1	D3401-041	Tow Cap	N/A

installed
on PWD tube

24.0

D356413

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

N/A

25.0

D356613

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

N/A

08/11/21

26.0

D36721

Phenolic Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

PHENOLIC WASHER

1339275

JP

27.0

AN3C4A

BOLT



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

Bolt

Pick:

Qty	Part Number	Description	Batch
4	AN3C4A	Bolt	11 109431

JP

28.0

AN960C10L

washer



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

washer

N/A

08/11/21

29.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Install tow Cap as per Dwg D3391

Identify as D3391-021

JP

08-11-20

KD

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Drawing Name: MID TUBE ASSEMBLY

Job Number: 41979

Part Number: D3391023

Job Number:



Seq. #:

Machine Or Operation:

Description :

30.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect thread of each insert using DT8821

08/11/01 (41)

31.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: PP 41686

08/11/20 (1)

32.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/11/26

Job Completion



MKF 08-11-25

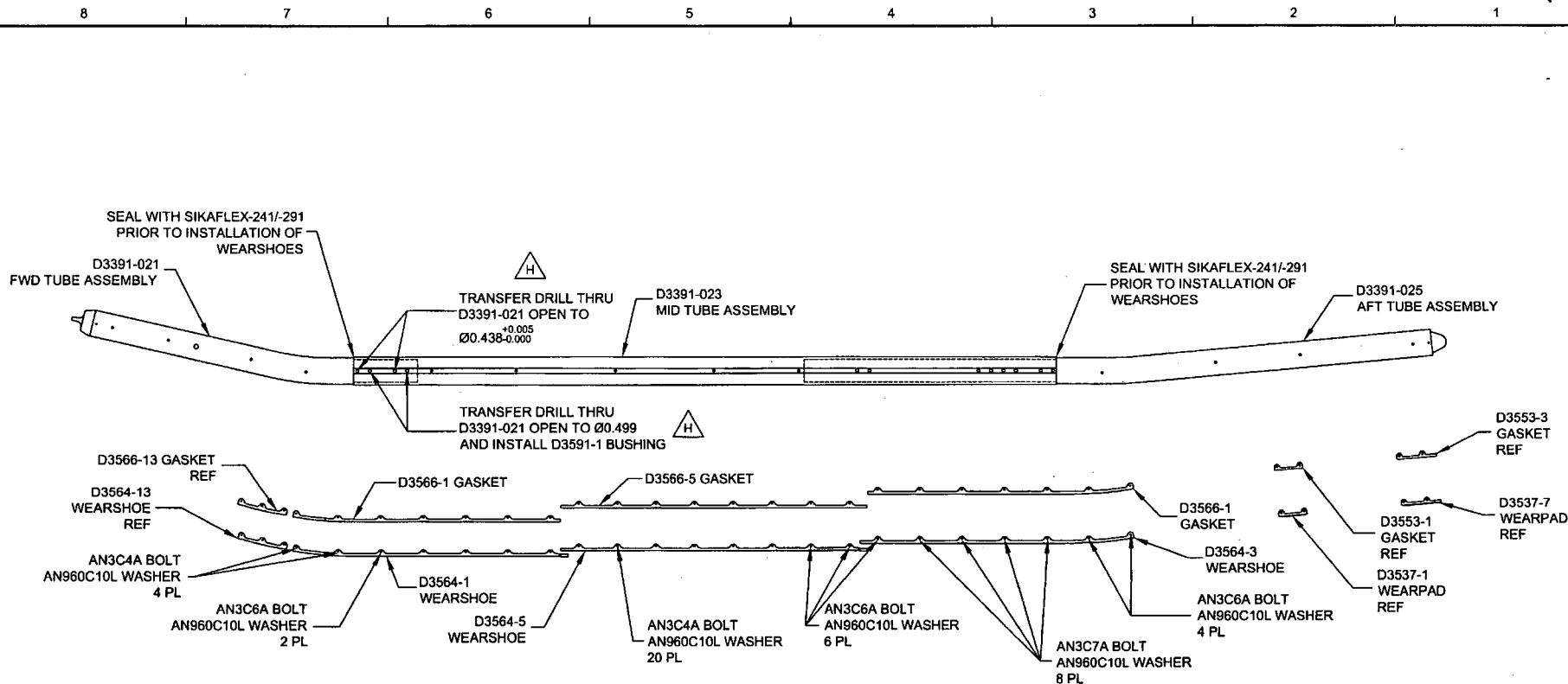
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3391-043 ASSEMBLY

D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
2	D3566-5	GASKET
2	D3591-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
6	AN3C7A	BOLT
44	AN960C10L	WASHER

GENERAL NOTES

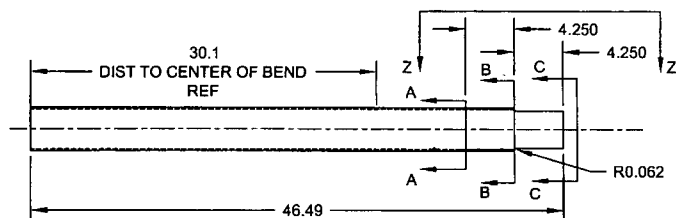
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

RELEASED
28-09-05/10

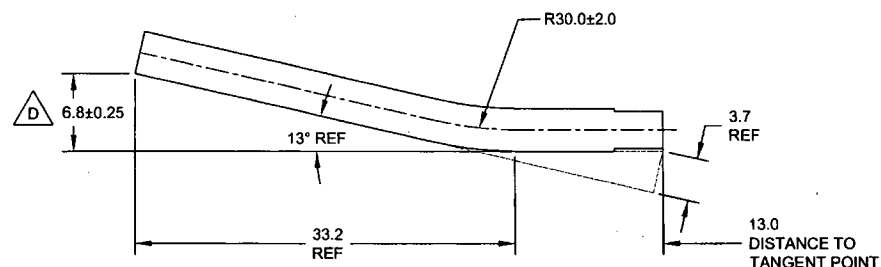
DESIGN	PH	DART AEROSPACE USA, INC
DRAWN	AJS	PORT HADLOCK, WA
CHECKED		DRAWING NO. REV. H
MFG. APPR.		D3391 SHEET 2 OF 8
APPROVED		TITLE SCALE
DE APPR.		412 FLOAT SKIDTUBE NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC

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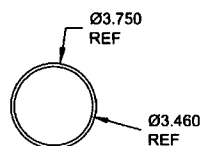
NO. 412
WORK ORDER
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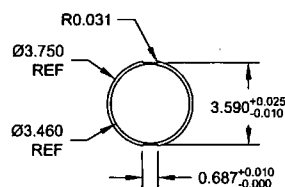
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



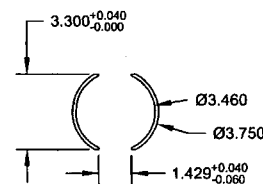
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



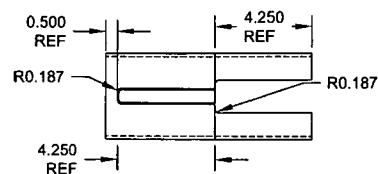
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SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X

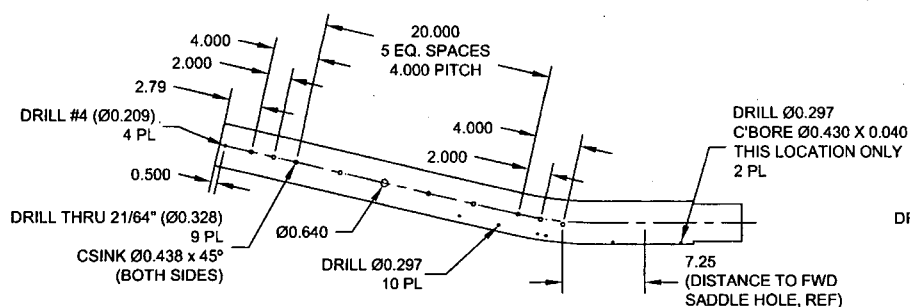


VIEW Z-Z
SCALE 2X

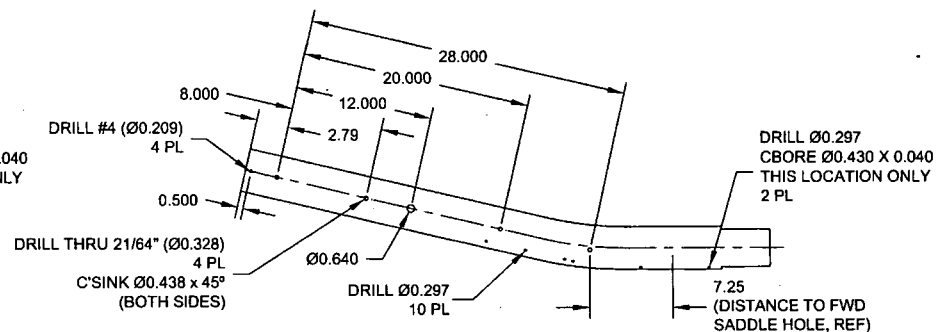
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08-05-11

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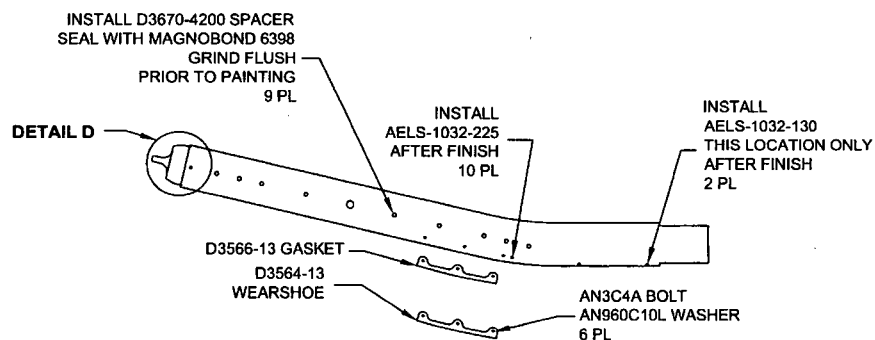
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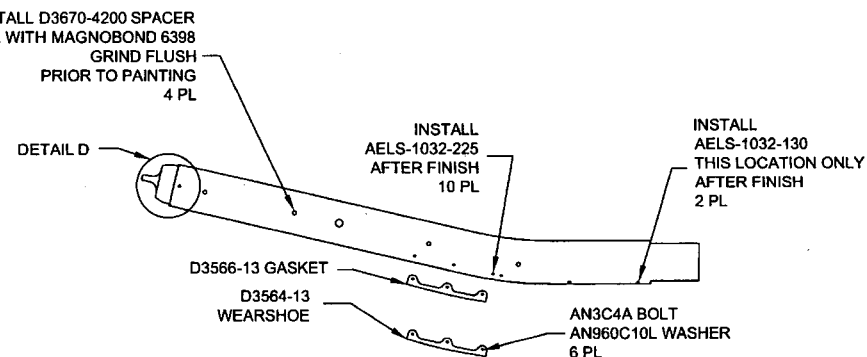
D3391-011 DRILLING DETAIL



D3391-021 DRILLING DETAIL



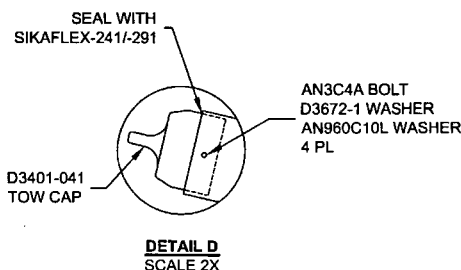
D3391-011 ASSEMBLY DETAIL



D3391-021 ASSEMBLY DETAIL

D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
1	1	D3564-13	WEARSHOE
1	1	D3566-13	GASKET
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
2	2	AELS-1032-130	INSERT
10	10	AELS-1032-225	INSERT



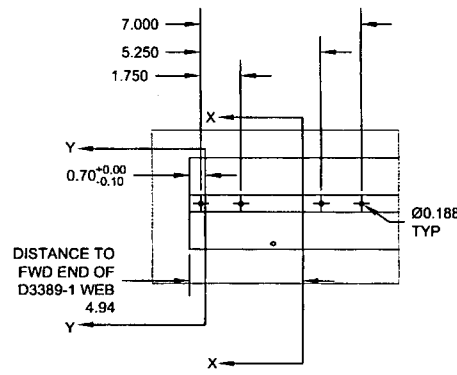
**DETAIL D
SCALE 2X**

RELEASED

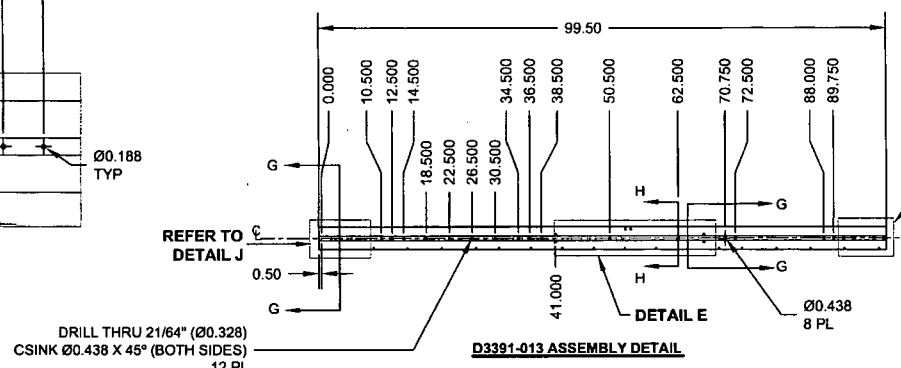
DESIGN		PH	DART AEROSPACE USA, INC	
DRAWN		AJS	PORT HADLOCK, WA	
CHECKED			DRAWING NO. REV. H	
MFG. APPR.			D3391 SHEET 4 OF 8	
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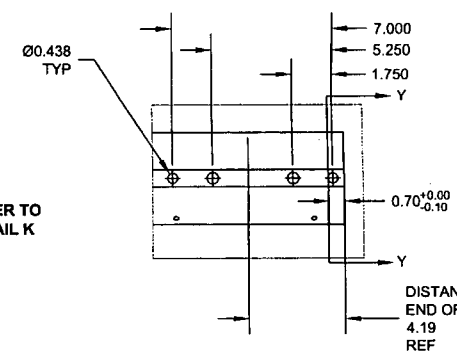
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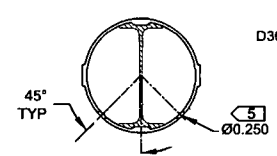
DETAIL J
SCALE 4X



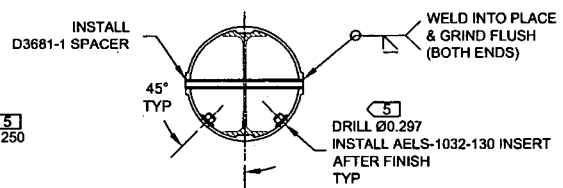
D3391-013 ASSEMBLY DETAIL



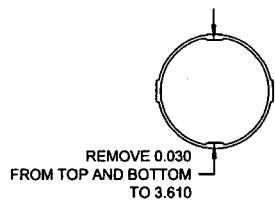
DETAIL K
SCALE 4X



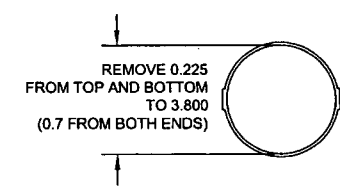
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



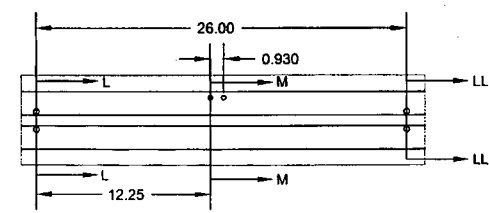
SECTION X-X
SCALE 5X



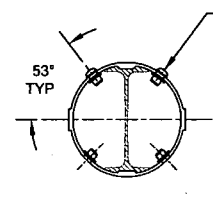
SECTION Y-Y
SCALE 5X

D3391-013 MID TUBE ASSEMBLY PARTS LIST

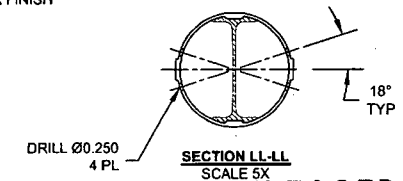
QTY -013	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW



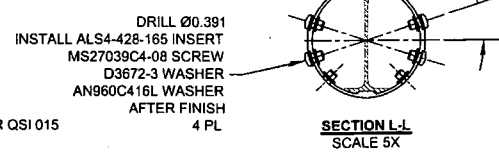
DETAIL E
SCALE NONE



SECTION M-M
SCALE 5X



SECTION LL-LL
SCALE 5X



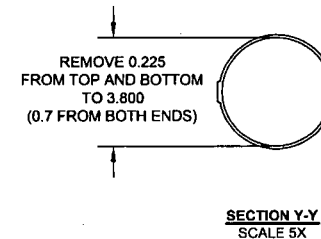
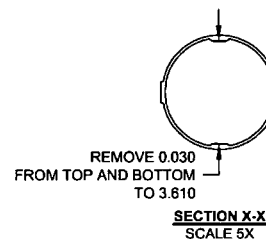
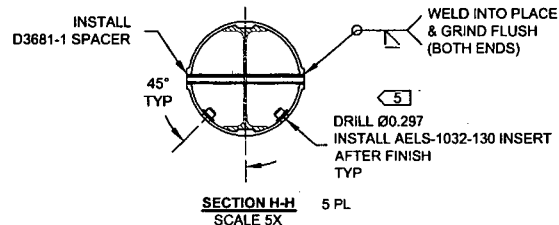
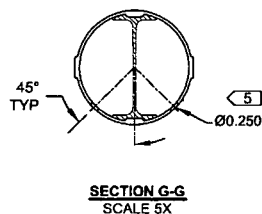
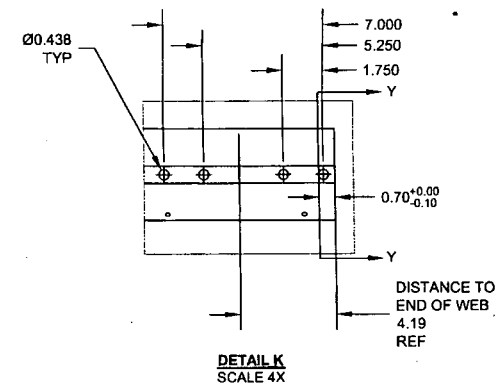
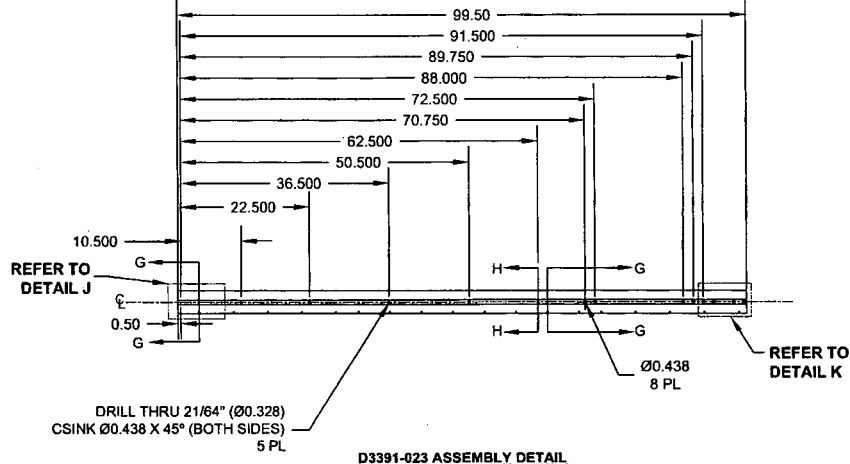
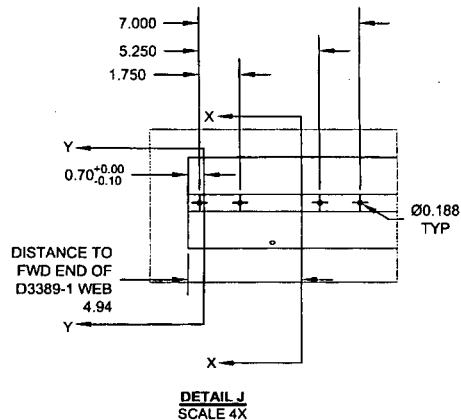
SECTION L-L
SCALE 5X

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D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY -	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

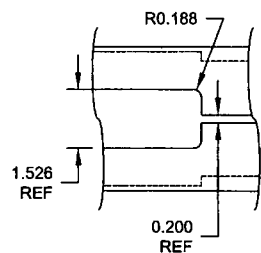
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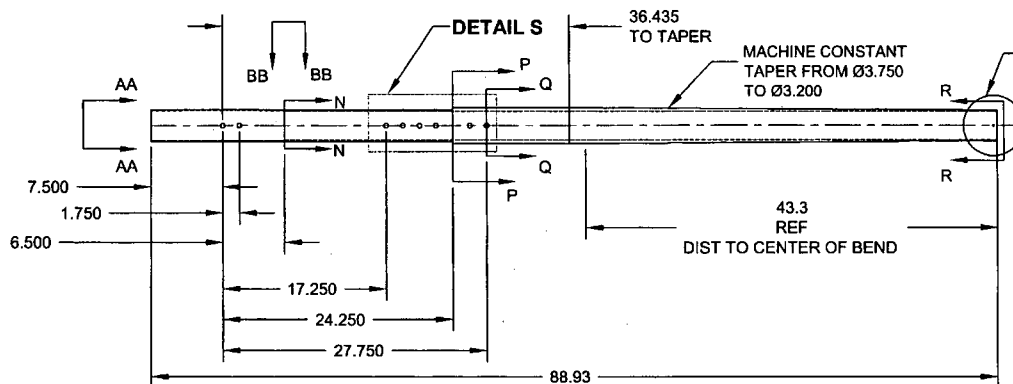
D3391-023 MID TUBE ASSEMBLY

MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
WELDING: PER DART QSI 004

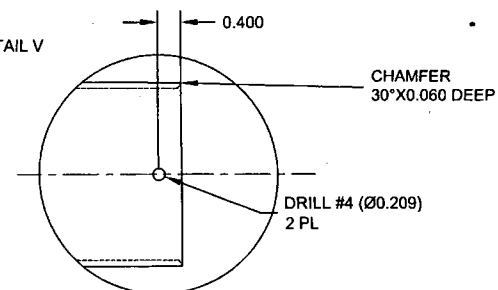
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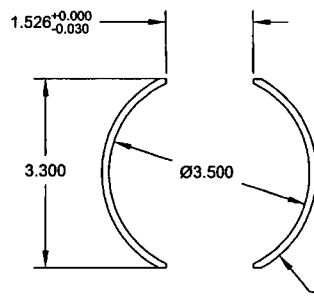
VIEW BB-BB
SCALE 4X



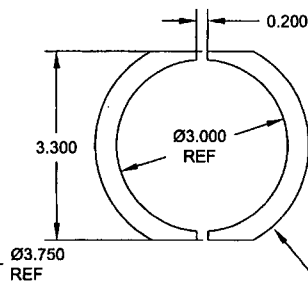
D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)



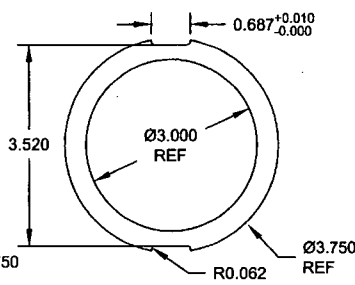
DETAIL V
SCALE 6X



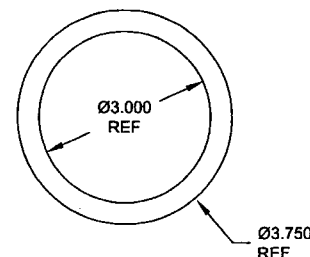
SECTION AA-AA
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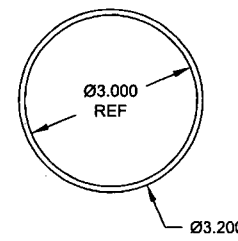
SECTION N-N
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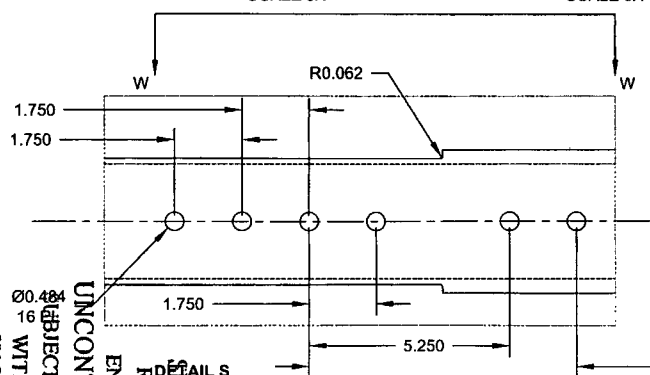
SECTION P-P
SCALE 6X



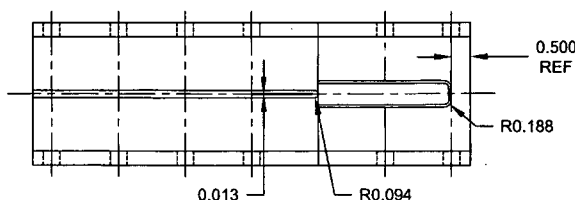
SECTION Q-Q
SCALE 6X



SECTION R-R
SCALE 6X



VIEW W-W
SCALE 4X

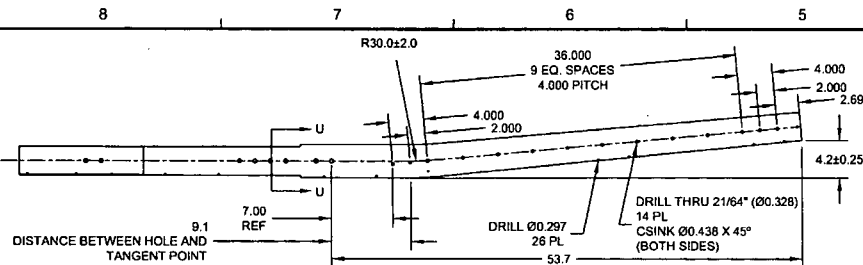


DETAIL S
SCALE 4X

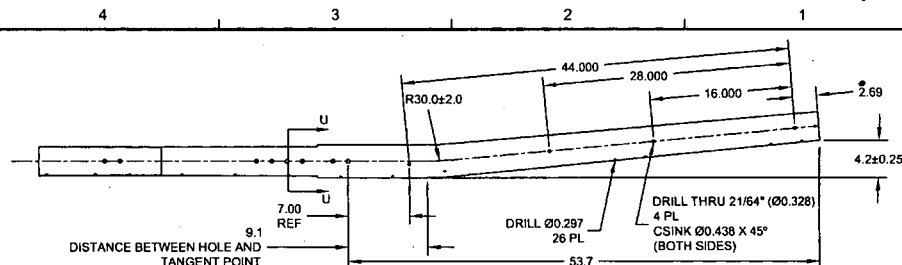
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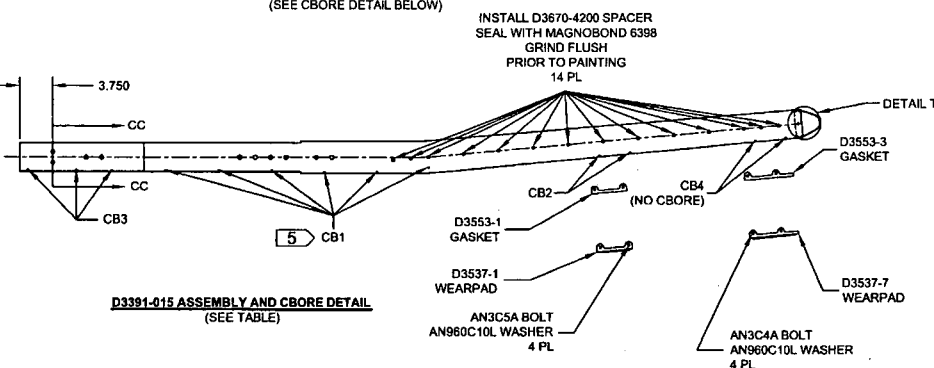
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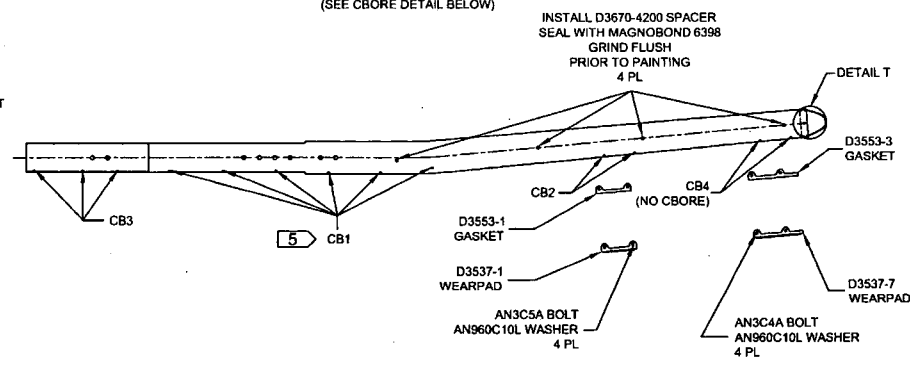
D3391-015 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)



D3391-025 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)



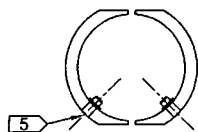
D3391-015 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)



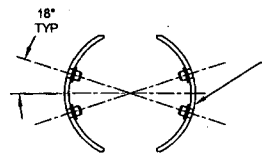
D3391-025 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

D3391-015-025 AFT TUBE ASSEMBLY PARTS LIST

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	X	D3391-015	AFT TUBE ASSEMBLY
X	X	D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
14	14	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
4	4	ALS4-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER

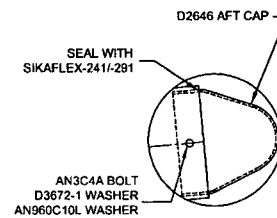


SECTION U-U
SCALE 3X



SECTION CC-CC
SCALE 3X

DRILL Ø0.391
CBOR Ø0.516 X 0.040 DEEP
INSTALL ALS4-428-165 INSERT
4 PL



DETAIL T
SCALE 4X

CBOR HOLES MARKED CB1-CB4 AS FOLLOWS AND
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBOR	P/N
CB1	12	12	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

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NO. 174

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 41748
Part number: D339 1023
Description: Mid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual:

pass[☒] fail[]

Penetration:

pass[☒] fail[]

UNACCEPTABLE

Cracks:

pass[☒] fail[]

Undercut:

pass[☒] fail[]

Pin holes:

pass[☒] fail[]

Overlap (cold lap)

pass[☒] fail[]

Porosity (surface):

pass[☒] fail[]

Coloration:

pass[☒] fail[]

Qualifier Det. Dural. Date of Test Coupon 080924

Welder Barclay Elliott Date of Test Coupon 08-09-24

The above named individual is qualified in accordance with AWS D17.1.2001 to weld